Alberta
ENERGY

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10-02

GAS ROYALTY CALCULATION INFORMATION BULLETIN February 2010

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PLEASE ENSURE YOUR PRODUCTION ACCOUNTANTS RECEIVE A COPY OF THIS DOCUMENT

A. PRICING RATES AND TRANSPORTATION INFORMATION

For Pricing, Royalty Rates and Transportation Information for December 2009, refer to Attachments 1, 1A, 2, 2A and 3. These attachments are also available in Excel Format.

B. NOTICES

Turnaround Time for AC Submissions

Facility Cost Centre Set-up/Change (AC1)
With the upcoming March 1 deadline of AC1 submissions for 2009, new FCC set-ups submitted through batch or on-line will be processed by the department within a half-day turnaround time and these requests will not be delayed due to an invoice cycle. All other FCC changes will be processed overnight and will not occur during an invoice cycle. AC1s submitted on the weekend and on any statutory holiday will not be processed until the next business day.

Annual Allowable Cost Submissions (AC2, AC3 and AC5)
AC2, AC3 and AC5 are processed nightly except:

- During an invoice cycle, and
- Submissions made on a weekend or on any statutory holiday, which will not be processed until the next business day.

Monthly Sulphur Corporate Average Price Calculation – VA4 Form

The department requires royalty clients with an annual sulphur production of 30,000 tonnes or greater in the 2009 production year to file VA4 forms monthly, beginning with the January 2010 production month. The VA4 form is due on or before the 15th day of the second month following the respective production month. A royalty client whose annual sulphur production is less than 30,000 tonnes may choose to file the VA4 forms monthly beginning with January's production month; however, if this choice is made, the client must file VA4 forms for the entire year. The department will use the VA4 forms to determine each client's monthly Sulphur Corporate Average

Price (S-CAP) and the monthly sulphur default price. We calculate each month's sulphur default price as the weighted average unit value of all arms length sales for all clients who filed VA4 forms for that month. The department will value and invoice the Crown royalty share of sulphur production monthly using the respective S-CAP price for clients who file VA4 forms, and the sulphur default price for clients who chose not to file VA4 forms. The VA4 form is subject to $100 in late filing penalties for each month or part of the month the form is past due. The VA4 form for the production month of January 2010 is due in the department by March 15, 2010.

Royalty clients who file monthly VA4 forms must file annual VA3 forms. The VA3 form remains the primary sulphur valuation tool and the S-CAP determined from each VA3 will replace the entire year's monthly prices determined from the VA4 forms. The VA3 is due on or before April 15th of

the year following the year of production. Interest is charged/paid on the Crown royalty difference when adjusting from monthly to annual valuation. The VA3 form is subject to a one time $1,000 late filing penalty.

The following royalty clients must submit VA4 forms effective with the 2010 production year, which includes any pricing information for each of its consolidated/amalgamated entities:

Client ID	Client Name	Client ID	Client Name
0017	IMPERIAL OIL RESOURCES	0PF8	HUNT OIL COMPANY OF CANADA, INC.
0026	ENCANA CORPORATION	0R46	HUSKY OIL OPERATIONS LIMITED
0039	TALISMAN ENERGY INC.	0RA3	PENGROWTH CORPORATION
0054	SUNCOR ENERGY INC.	0W9D	CONOCOPHILLIPS CANADA (BRC) PARTNERSHIP
0060	BP CANADA ENERGY COMPANY	0YT7	MANCAL ENERGY INC.
0226	NEXIN INC.	A05T	MEC OPERATING COMPANY ULC
0BP8	PENN WEST PETROLEUM LTD.	A08J	ENERPLUS OIL & GAS LTD.
0CW8	COMPTON PETROLEUM CORPORATION	A0L6	FAIRBORNE PIVOTAL PRODUCTION PARTNERSHIP
0F3F	DEVON CANADA	A162	DAYLIGHT ENERGY LTD.
0HE9	CANADIAN NATURAL RESOURCES LIMITED	A2F0	SHELL CANADA ENERGY
0JT1	EXXONMOBIL CANADA ENERGY	A2JD	BG INTERNATIONAL LIMITED
0L0D	SUNCOR ENERGY OIL AND GAS PARTNERSHIP	A2TG	TAQA NORTH LTD.

C. MONTHLY INFORMATION

December 2009 Royalty Due March 31

- **Royalty clients are to remit the total amount payable shown on the March 2010 Statement of Account by March 31, 2010.** If the amount payable includes accrued current period interest, the interest has only been accrued to the statement issue date. Clients must also include the additional interest that has accrued from the statement issue date to the date of payment, using the per diem amount provided.

- **The March 2010 Statement of Account shows your amount payable as of the Statement issue date. It includes any outstanding balances from your previous statement, your**

December 2009 invoice amount and any applicable current period interest charges. It also identifies refunds resulting from overpayments.

- Current period interest will not be charged on current invoice charges for the production month of December 2009 if it is paid in full by March 31, 2010.

- Current period interest will accrue on any overdue charges commencing the first day after the due-date until it is paid in full.

  Note: If the due date falls on a non-business day, the next business day will apply as the due date.

- Cheques are payable to the Minister of Finance, Province of Alberta.

January 2010 VA4 Due March 15

The VA4 forms for the production month of January 2010 are due in the department offices by March 15, 2010.

Note: If the due date falls on a non-business day, the next business day will apply as the due date for VA4 forms.

Registry Deadline Submissions

The Registry deadline submissions for SAF, OAF, and Volumetrics are posted in the Petroleum Registry of Alberta website "Reporting Calendars" under Calendars.

Changes to this calendar will be posted on the Registry website home page in "Broadcast Messages."

Interest Rate February 2010

Alberta Energy's interest rate for February 2010 is 3.25%.

November Provisional Assessment Charge

The summary of Provisional Assessment Charges for all production periods in the November 2009 billing period was:

First Time Provisional Assessment	Reversals of Provisional Assessments	Net Provisional Assessment
$8,829,638.68	($5,541,977.50)	$3,287,661.18

November Penalty Charges

The penalty table below shows at the form level, the total penalty charges and reversals, for the November 2009 billing period:

FORM	Penalty Charges	Penalty Reversals	Net Penalty Charges for 2009/11
AC2	$16,400	($6,800)	$9,600
AC4	$200	$0	$200
AC5	$5,600	$0	$5,600
NGL1	$0	$0	$0
VA2	$0	$0	$0
VA3	$0	$0	$0
VA4	$300	$0	$300
Total	**$22,500**	**($6,800)**	**$15,700**

Gas Royalty Calculation Support

Upon request, Gas Royalty Calculation staff will be available to meet with clients who need assistance with royalty reporting. Royalty clients requiring assistance are encouraged to contact your respective Gas Royalty Client Services portfolio representative, as identified in Section F of this bulletin, to arrange a meeting.

Well Event Measured Depth Determination Letter

The department has issued a "Well Event Measured Depth Determination Letter" under the Report Package DOE – Gas to facility operators via the PRA on February 1 and 12, 2010. This letter shows the confirmed Measured Depth (MD) of each active well event that will be used to calculate the Depth Factor (DF) of the quantity component rate under the new royalty formula. A well event that is not listed on the letter and does not have a confirmed MD will receive a DF of 1. When the changes to the MD are confirmed by the department, a letter is issued to a facility operator who reports changes through the PRA to well event attributes affecting MD. All changes to the MD are applied on a go forward basis only, if a retroactive change is required, a written request must be submitted to the department. Facility operators are advised to submit well event attribute changes by the last day of the calendar month in order for timely determination of MD.

D. INFRASTRUCTURE DATA CHANGES

Client ID Listing

The BA Identifiers Report is a directory of Business Associate (BA) names, codes, status (e.g. struck, active, amalgamated, etc.), status effective dates, and effective August 2004, includes Working Interest Owner (WIO) role start/end dates.

This report is also published daily on the Petroleum Registry website at:

http://www.petroleumregistry.gov.ab.ca

The department reminds Business Associates to review their WIO role to ensure that the start and end dates are reflected correctly. If the BA does not have an active WIO role, the operators cannot allocate volumes to the BA for the relevant production periods through the SAF/OAF allocations.

- If a BA has a WIO role, then that BA can receive SAF/OAF allocations from the WIO role start date forward.
- If a BA has a WIO role with an end date, then they can only receive SAF/OAF allocations from the WIO role start date until the end date. Any SAF/OAF allocations after the end date will be rejected.
- If a BA does not have a WIO role start date, then that BA cannot receive SAF/OAF allocations.

Please contact Client Registry at 780-422-1395 if you have any questions regarding the information supplied on this listing.

Client Status Changes

Clients must ensure that all royalty documents are completed using only valid client names and IDs. It is critical that royalty clients use current legal client names and their appropriate IDs on all documents to ensure accurate royalty calculation and to prevent provisional assessment and penalties. Rejects will occur when invalid IDs are used.

If you require information regarding client names or IDs, please contact Client Registry at 780-422-1395.

Nova Tolls - Multiple Gas Reference Prices

Royalty information related to the implementation of the Factor Model negotiated with industry for determining Multiple Gas Valuation Prices is provided on the Natural Gas website's Royalty Related Information page under Facility Royalty Trigger Factors and Meter Station Ties.

E. REMINDERS

Submission of Production Year 2009 Allowable Cost (AC) and Corporate Average Price Calculation (VA) Submissions

Royalty clients are advised that Allowable Cost (AC1, AC2, AC3 and AC5) and Annual Corporate Average Price Calculation - Sulphur (VA3) submissions for the 2009 production year are due on the following dates:

Form Type	Due Date	Penalty
AC1	March 01, 2010	-
VA3	April 15, 2010	$1,000/One time only
AC2	April 30, 2010	$100/Form/Month upon due date to a maximum of $600
AC3	May 17, 2010	-
AC5	May 17, 2010	$100/Form/Month upon receipt to a maximum of $600

Operating costs (formerly AC4) must be reported with capital costs (revised AC2) on one submission and there is no longer a Corporate Average Price Calculation (VA2) for Gas.

Details on the changes to Gas Cost Allowance are available on the Alberta Energy Internet address: www.energy.alberta.ca. From "Our Business", navigate to "Natural Gas", "Legislation, Guidelines & Policies", "Gas Royalty Information Bulletins".

Please note that all allowable cost submissions (initial and amended filings for current and prior production years) by FCC operators are required to be completed on the Registry. Although use of the Registry to submit AC3 and AC5 data is mandatory for operators, it remains voluntary for non-operators. However, non-operators are strongly encouraged to use the Registry to submit and retrieve their AC3 and AC5 data. The business rules and submission method for VA3 submissions remain the same with notification from the department informing clients that their submissions have been processed. Annual allowable cost submissions are processed nightly except during an invoice run cycle. New facility cost centre set-ups are processed within four hours of receipt if received in the morning with an overnight turnaround if received in the afternoon. Processing of new facility cost centre set-ups continue during an invoice run cycle. Sulphur Corporate Average Price submissions are processed as they are received.

The department encourages timely submissions to allow sufficient turnaround time for corrections. Non-operators are particularly encouraged to file their Sulphur Corporate Average Price submissions timely by mail or direct delivery to the Calgary Department of Energy Office Mailroom. The font size on faxed forms must be 10 pt or greater and must not be bold. Penalties will apply where valid system acceptable submissions are not received by the filing deadline. Barring the department's responsibility, inability to submit annual cost submissions on the Registry and/or illegible script will not reverse a penalty once imposed.

Should you have any questions, please contact Will Wong at (780) 415-0755 or e-mail Will.Wong@gov.ab.ca.

Capital and Operating Cost Allowance Filing - Expected AC2 Reports on the Registry

The Crown deducts allowances for costs incurred and paid in Alberta for compressing, gathering and processing its royalty share of gas and gas products. Commencing with the 2009 production year, annual capital and operating cost allowances are combined on the AC2-V4 with an ability to allocate these cost allowances among working interest owners and multiple delivery facilities. The Facility Cost Centre (FCC) operator, on record at year end, is responsible for filing the AC2-V4 via the Registry.

The Expected AC2 Report identifies the FCC operator as of a specific date and is generated to aid FCC operators in verifying their status as well as effective date. In addition, it identifies whether a valid AC2 was submitted for a production year.

The Expected AC2 Report is grouped by an Energy Resources Conservation Board (ERCB) Facility and related FCC. The report displays the following:

- Facility ID and Facility Name
- FCC ID and FCC Name
- "Y"(yes) and "N"(no) Indicators to identify whether or not the FCC is fully depreciated
- The FCC Operator Effective Date
- "Y"(yes) and "N"(no) Indicator to determine whether or not an AC2 was submitted for the production year
- All consolidated/amalgamated companies have been included within this report, where applicable.

The information in the report reflects the department's records as of the file preparation date and does not reflect submissions subsequently received and/or processed. Any submissions (AC1, AC2, Invoice Consolidation Concurrence – ICC1, etc) processed after the report date will not be shown.

Please note that absence of a company name or FCC from these reports will not be an acceptable reason to waive a penalty once assessed.

The Expected AC2 Report is available in PDF, TXT and CSV formats and is generated weekly during the Gas Cost Allowance reporting season. Expected AC2 reports will be available on the Registry on Monday, February 1, 2010, and each Monday thereafter to Monday, May 10, 2010, with the exception of Mondays that are non-business days or Mondays that coincide with invoice processing. This report may also be requested on demand, on a client basis, by contacting your Gas Royalty Client Service portfolio representative as identified in Section F of this bulletin or Will Wong at (780) 415-0755.

If you are not the operator for the FCC identified on the report, please submit a Facility Cost Centre Set-Up/Change (AC1-V2) via the Registry identifying the change in operator and its effective date.

An AC1 submission identifying an FCC change in operator is due on or before the last day of the month following the production month in which the change occurred.

Please note that FCCs that are shut-in or terminated for an entire production year will not appear on the report. Operators of fully depreciated (zero remaining useful life) FCCs remain responsible for AC2-V4 submissions. Submissions are required to ensure the department has correctly identified Capital and Operating Cost Allowance allocations to working interest owners and/or other delivery facilities as well as Custom Processing Adjustment Factors for the FCC.

AC2-V4 submissions are required to be filed on the Registry. An AC2-V4 can be entered online or by batch. If a system acceptable AC2-V4 submission is not received and processed by the filing deadline (April 30th of the year following the production year to which it relates) a penalty will be assessed. Please contact The Petroleum Registry of Alberta, Service Desk, regarding access to or utilization of the registry at 1-800-992-1144.

Custom Processing Allowance Fees Paid – Expected AC5 and Energy Adjusted Gas Equivalent Volume (EAGEV) Reports on the Registry

Royalty clients that have incurred and paid for compressing, gathering and/or processing gas and gas products on a fee-for service basis, in Alberta, are required to submit an AC5-V4 to the department by May 15th of the year following the production year to which it relates. This includes custom processing fees associated with freehold, purchased, and out-of-province volumes. The Expected AC5 Report provides a complete list of the Energy Resources Conservation Board (ERCB) facilities and related Facility Cost Centres (FCCs) where the operator has allocated custom user volumes to the royalty client in Parts 6 and 10 (Custom Processing Adjustment Factor) of a Capital & Operating Cost Allowance AC2-V4 submission.

This report is generated to aid royalty clients in identifying the ERCB facilities and FCCs that **require** the royalty client to file an AC5-V4. The information in the report identifies the department's records as of the file preparation date and does not reflect submissions subsequently received and/or processed.

The Expected AC5 Report is grouped by ERCB Facility and related FCC. The report displays the following:

- FCC ID, FCC Name & FCC Type
- Operator ID and Name allocating custom user volumes
- Allocated Custom Processing (CP) volumes in 10^3m^3

In addition, as of the report generation date, there are "Y" (yes) and "N" (no) indicators for the previous and current production years that identify whether the:

- department has received a valid AC5 submission for the royalty client and
- whether the ERCB facility has been reported on the AC5 submission.

The EAGEV report is generated for all royalty clients and identifies volumetric allocations for volumes produced (SAF/OAF and RMF2) at ERCB facilities. This report should be used in

conjunction with an Expected AC5 Report as a royalty client cannot file an AC5-V4 submission unless volumes have been reported at ERCB facilities identified on the EAGEV report. In addition, if a royalty client has custom user volumes, which do not appear on the Expected AC5 Report, this indicates that the operator has not identified the client on the AC2-V4 submission. This inconsistency may indicate filing discrepancies that require an amendment by the facility operator.

If a system acceptable AC5-V4 submission is not received and processed by its filing deadline (May 15th of the year following the production year to which it relates) it is subject to penalty charges upon receipt. Please note that the absence of a company name or an FCC from these reports will not be an acceptable reason for a waiver of penalty.

Both the Expected Custom Processing Fees Paid (AC5) report and the EAGEV report are available in PDF, TXT and CSV formats. Expected AC5 and EAGEV reports will be available on the Registry on Friday, February 5, 2010, and each Friday thereafter to Friday, May 28, 2010, with the exception of Fridays that are non-business days or Fridays that coincide with invoice processing. Operators of FCCs must utilize the Registry to retrieve these reports. The delivery of the EAGEV report on these specific dates is intended for the convenience of the client only, and is not intended to replace the normal delivery and/or availability of the report that is scheduled monthly. Non-operators and other royalty clients that currently submit and receive hard documents will continue to receive the Expected AC5 report accompanied with an EAGEV report, by mail, on the same delivery schedules prescribed above.

In addition, both reports may be requested on demand on a client basis by contacting your Gas Royalty Client Service portfolio representative as identified in Section F of this bulletin or Will Wong at (780) 415-0755 or email Will.Wong@gov.ab.ca.

Electronic filers are required to submit their Allowable Cost forms via the Registry. Contact the Petroleum Registry of Alberta Service Desk regarding access to or utilization of the Registry. To contact the Petroleum Registry of Alberta Service Desk call: 1-800-992-1144.

Please be reminded that the deadline for filing an AC5-V4, for the production year 2009, is May 17, 2010.

Update - Statutory Requirement and Recalculation of 2005 Royalty

A production year becomes statute barred on December 31st, four years after the end of a production year. Once a year has become statute barred, calculation or recalculation of royalty does not occur on a monthly basis. Section 38 of the *Mines and Minerals Act* provides for recalculation of royalty.

Audits in Progress

Non-operator partners are advised that certain 2005 allowable costs, custom processing fees, capital costs and custom processing adjustment factor (CPAF), and volumetric reporting discrepancy audits are currently in progress.

However, completion of the audits and royalty recalculations and assessments, if required, will occur in 2010. For an initial list of the affected ERCB facilities, refer to Attachment 4.

Royalty clients are also reminded that amendments received by the department in the fourth year following the production year may be subject to audit. If the amendments are received late in the fourth year and insufficient time is available for the department to commence a review of the amendments prior to the end of the year, the department reserves the right to commence the audit at the beginning of the fifth year.

If you have any questions, please contact Kris Pretty of the Compliance & Assurance group at 403-297-8785.

Department Initiated Amendments
For a list of Deep Gas Royalty Holiday (DGRHP) wells that require the fifth (5^{th}) year to be open for the 2005 production year, refer to Attachment 5. These wells are under review for the DGRHP program and the exemption, if approved, will be applied in 2010.

RGA Allocations

The Department will be conducting a review of all amendments received for RGA Allocations, including the ones with out-of-province destination, for the production year 2005. This review will be completed in the calendar year 2010.

Unit ID Listing Changes

Currently on the Alberta Energy website, we provide a Unit ID listing that is updated on a monthly basis. The information provided is the Unit ID, Unit Name, Unit Effective Date, Unit Termination Date, Current Operator Name and Operator Effective Date.

Effective December 2009, we will be adding two additional information components, which will be Unit Amended Eff Date and Amendment as of Date. The Unit Amended Eff Date provides the production period in which an amendment has been applied to the unit. The Amendment as of Date provides which calendar date the amendment was updated in our system.

As done previously, this listing will be updated on a monthly basis before the infrastructure cut-off deadline. If you have any questions, please contact Penny White at (780) 422-8083.

New and Revised Meter Station Factors

The department has published in Information Letter 2009-41, new and revised Meter Station Factors. Meter Station Factors for new meter stations are effective for the production periods November 2008 to September 2009. Meter Station Factors for those prescribed effective the October 2009 production period until otherwise changed are also identified in this Information Letter.

If you have any questions, please contact Bill Zanewick, Director, Gas Royalty Valuation and Markets at (403) 297-5465 or e-mail at bill.zanewick@gov.ab.ca.

F. POINTS OF CONTACT

Petroleum Registry of Alberta

The Petroleum Registry of Alberta Service Desk is the focal point for communications with the Registry regarding preparations for, access to, or utilization of the Registry. To contact the Petroleum Registry of Alberta Service Desk:
Phone: 403-297-6111 or 1-800-992-1144
Fax: 403-297-3665
Email: petroleumregistry.energy@gov.ab.ca

Alberta Energy Internet

Prices, Royalty Rates and Transportation Information are available on the Alberta Energy Internet address: www.energy.alberta.ca, from "Our Business", navigate to "Natural Gas", "About Natural Gas", "Prices", "Alberta Natural Gas Reference Price (ARP)".

In addition, both the Gas Royalty Information Bulletins and Information Letters are also available under "Our Business", navigate to "Natural Gas", "Legislation, Guidelines & Policies".

Gas Royalty Client Services

Gas Royalty Client Services is structured as a Business Associate client portfolio system, which assigns a given Business Associate to one of four Client Services teams. Listed below is the portfolio breakdown along with Client Services Team Leads and phone numbers. The portfolios are divided by company name and not by BA ID.

Example: If your company name is the "Gas Company" you would call C – G team at 780-644-1202.

Business Associate	Phone Number and E-mail Address	Team Lead
Numbered companies, A, B & L	780-644-1201 GRCST1@gov.ab.ca	Todd Atwood
C – G	780-644-1202 GRCST2@gov.ab.ca	Lily Hiew
H – P (excluding L)	780-644-1203 GRCST3@gov.ab.ca	Chris Nixon
Q – Z	780-644-1204 GRCST4@gov.ab.ca	Jyoti Bhambhani

Gas Royalty Reception:	780-422-8727
Fax:	780-427-3334 or 780-422-8732
Alberta Toll Free:	780-310-0000

Hours of operation are 8:15 a.m. to 4:30 p.m. Voice messages left after 4:30 p.m. will be answered the next business day.

In situations where a company has just amalgamated or purchased another company, the general rule is to call the team that is responsible for the "Supra" business associate, or Royalty payer. Below are some guidelines for clients who are unsure which Client Services Team to call regarding their questions.

1. **Amalgamation/consolidation** - Call the team responsible for the "Supra" business associate (Royalty Payer).
   i.e. ABC Oil and Gas amalgamates with Zed Exploration and Zed is the amalgamator (royalty payer). When calling Client Services regarding business for ABC Oil and Gas, you would call Team 4 (Q-Z) (780-644-1204) because Zed Exploration is now the Supra business associate and royalty payer. This rule would apply even if you were calling regarding business that is prior to the acquisition or amalgamation.

2. **Asset Purchase** - Call the team responsible for your company.
   i.e. 123 Gas purchases the assets of TSP Exploration, but not the company. When calling Client Services regarding business for 123 Gas, you would call Team 1 (# Co., A, B, & L) (780-644-1201) because you have only purchased assets.

3. **Consultants/service providers** - If you have a contract to provide production accounting services to a company, call the team responsible for your client's company.
   i.e. Paul Snow Consulting Services enters into a contract with Duckback Oil and Gas and Olive Oil and Gas. Paul Snow would contact Team 2 (C-G) (780-644-1202) to discuss Duckback Oil business and Team 3 (H-P excluding L) (780-644-1203) to discuss Olive Oil and Gas business. At the time the contract is signed, Paul Snow would have had each company notify the appropriate team that he was authorized to access information for their company.

Reference Prices and Valuation Allowances Calculation Information

Gas Royalty Valuation and Markets
300, 801 – 6 Avenue SW
Calgary, Alberta T2P 3W2
Telephone: 403-297-5514
Fax: 403-297-5400

Deen Khan
Director, Gas Royalty Calculation
Royalty Operations – Edmonton

Attachments

2009 GAS AND ISC PRICES

MONTH	Gas Reference Price ($/GJ)	Methane ISC Reference Price ($/GJ)	Methane ISC Par Price ($/GJ)	Ethane ISC Reference Price ($/GJ)	Propane ISC Reference Price ($/GJ)	Butane ISC Reference Price ($/GJ)	Pentanes plus ISC Reference Price ($/GJ)
JAN	5.77	5.74	5.74	6.15	6.27	6.29	6.31
FEB	4.66	4.61	4.61	5.12	5.30	5.33	5.35
MAR	4.01	3.97	3.97	4.53	4.71	4.72	4.75
APR	3.41	3.35	3.35	3.88	4.09	4.12	4.14
MAY	3.13	3.10	3.10	3.42	3.53	3.56	3.58
JUN	2.97	2.94	2.94	3.30	3.42	3.44	3.46
JUL	2.94	2.92	2.92	3.18	3.24	3.27	3.30
AUG	2.72	2.70	2.70	2.83	2.85	2.88	2.91
SEPT	2.48	2.45	2.45	2.73	2.86	2.88	2.91
OCT	3.40	3.36	3.36	3.63	3.74	3.77	3.78
NOV	3.77	3.76	3.76	3.91	3.92	3.95	3.99
DEC	4.51	4.45	4.45	4.90	5.12	5.17	5.20

DETAIL OF THE DECEMBER 2009 GAS AND ISC REFERENCE PRICES						
	Gas	Methane	C2-IC	C3-IC	C4-IC	C5-IC
Weighted Average Price of Alberta	4.869	4.837	5.144	5.282	5.292	5.289
Deductions: Intra – Alberta Transportation	0.301	0.320	0.183	0.128	0.099	0.075
Marketing Allowance	0.019	0.019	0.019	0.019	0.019	0.019
Price Before Pipeline Factor	4.549	4.498	4.942	5.135	5.174	5.195
Pipeline Fuel/Loss Factor	0.990	0.990	0.990	0.990	0.990	0.990
Price before Special Adjustment	4.505	4.455	4.894	5.085	5.124	5.144
Special Adjustment	0.000	0.000	0.000	0.000	0.000	0.000
Price before 2% amendment limitation or rounding	4.505	4.455	4.894	5.085	5.124	5.144
Amendments: Carry forward (from previous RP month	0.004	0.002	-0.001	-0.003	0.004	0.002
Prior Period Amendment Adjustment (current RP mon	0.000	-0.007	0.007	0.038	0.039	0.050
Calculated RP after Amendments	4.509	4.450	4.900	5.120	5.167	5.196
DECEMBER 2009 Reference Price	**4.51**	**4.45**	**4.90**	**5.12**	**5.17**	**5.20**
Difference = value carried forward to next RP month	-0.001	0.000	0.000	0.000	-0.004	-0.004
Adjusted IATD (before Prior Period Amendments)		0.317	0.181	0.127	0.098	0.075
Prior period Amendments (IATD and Pipeline Fuel Los		0.000	0.000	0.000	0.000	0.000
Adjusted IATD (after Prior Period Amendments)		0.317	0.181	0.127	0.098	0.075

2009
NATURAL GAS LIQUIDS PRICES

MONTH	Ethane Reference Price ($/GJ)	Ethane Par Price ($/GJ)	Propane Reference Price ($/m3)	Propane Floor Price ($/m3)	Butane Reference Price ($/m3)	Butane Floor Price ($/m3)	Pentanes plus Reference Price ($/m3)	Pentanes plus Par Price ($/m3)	Sulphur Default Price ($ per tonne)
JAN	6.15	6.15	230.29	209.33	310.61	206.67	348.86	325.57	21.41
FEB	5.12	5.12	258.66	188.18	277.46	185.58	332.24	304.31	9.42
MAR	4.53	4.53	191.60	170.24	311.71	180.47	405.64	380.07	35.33
APR	3.88	3.88	171.72	169.45	298.88	176.85	399.85	370.33	28.70
MAY	3.42	3.42	168.58	167.74	297.93	187.74	423.40	391.47	25.58
JUN	3.30	3.30	201.00	191.86	357.43	242.85	470.29	450.47	12.82
JUL	3.18	3.18	152.83	152.98	332.74	236.33	439.05	415.03	42.08
AUG	2.83	2.83	160.85	148.14	394.72	228.96	468.90	452.65	1.37
SEPT	2.73	2.73	213.48	194.59	360.13	258.92	464.65	448.88	0.19
OCT	3.63	3.63	251.83	226.58	422.04	282.29	485.68	465.66	0.46
NOV	3.91	3.91	289.32	258.03	439.85	324.51	505.26	485.25	1.94
DEC	4.90	4.90	326.74	278.76	444.04	353.12	503.74	483.64	0.29

ANNUAL SULPHUR DEFAULT PRICE

2004	2005	2006	2007	2008
31.88	33.97	18.89	32.88	$297.39

2009

NGL TRANSPORTATION ALLOWANCE AND DEDUCTIONS

MONTH	PENTANES PLUS (a)				PROPANE AND BUTANE (b)				PENTANES PLUS, PROPANE & BUTANE (c)				FRAC. ALLOW. (per m3)
	REGION				REGION				REGION				
	1	2	3	4	1	2	3	4	1	2	3	4	
JAN	27.97	10.55	36.88	18.00	39.25	25.79	33.99	-3.31	40.23	45.50	43.56	29.53	17.25
FEB	25.80	30.88	42.93	25.11	27.25	12.51	21.86	-11.81	46.71	47.25	67.48	33.91	17.25
MAR	26.82	21.32	38.98	22.16	37.54	27.84	31.17	-40.67	58.25	52.01	64.22	45.99	17.25
APR	28.19	26.90	45.36	29.98	42.87	25.56	35.55	8.19	55.88	50.16	60.38	42.39	17.25
MAY	29.40	28.03	63.30	29.70	33.17	20.09	88.53	46.06	46.67	43.29	56.38	34.81	17.25
JUN	14.94	23.55	36.40	25.25	40.56	35.36	38.57	60.65	61.31	51.83	60.30	49.21	17.25
JUL	19.35	27.85	33.44	30.23	34.85	30.12	61.31	37.87	53.14	45.30	50.11	40.98	17.25
AUG	12.81	17.64	23.69	25.77	32.48	31.94	7.94	18.41	68.26	64.12	68.87	55.76	17.25
SEPT	11.64	18.05	24.65	22.70	18.56	27.61	4.88	13.82	55.78	47.76	64.83	42.47	17.25
OCT	15.05	23.75	26.95	28.87	69.06	46.76	59.54	11.18	70.77	60.63	74.26	65.54	17.25
NOV	15.33	23.51	25.29	26.60	58.99	38.82	22.41	1.93	61.81	50.53	58.95	49.89	17.25
DEC	15.68	25.08	25.29	24.51	64.26	26.08	34.80	-4.20	55.59	51.73	61.01	52.92	17.25

(a) Pentanes Plus obtained as a specification gas product,
(b) Propane and Butane obtained as specification products, and
(c) Pentanes Plus, Propane and Butane contained in a natural gas liquids mix.

Note: For details on "Prior Period Amendment Effects", see Attachment 2A.

PRIOR PERIOD AMENDMENT EFFECTS				
NGL REFERENCE PRICES	DECEMBER 2009			
	Propane	*Butanes*	*Pentanes*	
Price before amendments	326.739956	444.041604	503.741150	
Opening Rollover (from prior business mth)	-0.002997	0.002017	0.002115	
Prior Period Amendment Adj. (NGL-100)	0.000000	0.000000	0.000000	
Published Reference Price	**326.74**	**444.04**	**503.74**	

TRANSPORTATION ALLOWANCES	DECEMBER 2009											
	Pentanes Plus				Propane and Butane				Pentanes Plus, Propane & Butane			
AMENDMENTS	Region 1	Region 2	Region 3	Region 4	Region 1	Region 2	Region 3	Region 4	Region 1	Region 2	Region 3	Region 4
Opening Rollover (from prior business mth)	0.003829	-0.003946	-0.002333	0.000601	0.000585	0.004049	0.003456	-0.004812	0.004210	-0.000613	0.000335	0.003219
Prior Period Amendment Adj. (NGL-100)	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Total Amendment Effect	0.003829	-0.003946	-0.002333	0.000601	0.000585	0.004049	0.003456	-0.004812	0.004210	-0.000613	0.000335	0.003219
Calculated Transp. Differential	15.674797	25.084158	25.296339	24.507091	64.256558	26.071110	34.796181	-4.191284	55.590370	51.733518	61.008397	52.920259
Calculated Transp. Differential after Total Amendments	15.678626	25.080212	25.294006	24.507692	64.257143	26.075159	34.799637	-4.196096	55.594580	51.732905	61.008732	52.923478
Published Transportation Allowance	**15.68**	**25.08**	**25.29**	**24.51**	**64.26**	**26.08**	**34.80**	**-4.20**	**55.59**	**51.73**	**61.01**	**52.92**

Effective the January 2009 production period, the royalty rates for **methane** and **ethane** will be calculated based on a new royalty formula. The new royalty formula consists of the sum of a price component and a quantity component. The new royalty rates will range from 5% to 50%. **Propane** and **butanes** will have fixed royalty rates of 30%, whereas **pentanes plus** will have a fixed royalty rate of 40%.

The price component of the new royalty formula royalty rate for methane and ethane is determined by the monthly methane or ethane par price (PP)

Price ($/GJ)	r_p
PP ≤ 7.00	(PP – 4.50) * 0.0450
7.00 < PP ≤ 11.00	(PP – 7.00) * 0.0300 + 0.1125
PP > 11.00	(PP – 11.00) * 0.0100 + 0.2325
Maximum	30%
Minimum	Can be negative (-20.25% if PP=0)

The par price is a provincial weighted price determined by the department and published in the Information Letter for each production month. Determination of the par price has not changed under the Alberta Royalty Framework.

The quantity component of the new royalty formula royalty rate for methane and ethane is based on the average daily production (ADP) of the well event. The quantity component is adjusted for either the depth of the well event and/or the acid gas content of the well event.

Quantity ($10^3m^3/d$)	r_q
ADP≤ (6 * DF)	[ADP – (4 * DF)] * (0.0500/DF)
(6 * DF) < ADP ≤ (11* DF)	[ADP – (6 * DF)] * (0.0300/DF) + 0.1000
ADP > (11* DF)	[ADP – (11 * DF)] * (0.0100/DF) + 0.2500
Maximum	30%
Minimum	Can be negative

The ADP for a well event is the total raw gas production in thousand cubic metres (10^3m^3) for the month divided by the total hours of production in that month multiplied by 24. The ADP formula is as follows:

$$ADP = \frac{\text{Total raw gas production}}{\text{Total hours of production}} \times 24$$

Acid Gas Factor (AGF) is a factor that adjusts the ADP of a well event if that well event is producing high amounts of acid gas, that is, if the combined concentration of hydrogen sulphide (H2S) and carbon dioxide (CO_2) is greater than 3% and less than or equal to 25%. If a well event has an acid gas content of less than or equal to 3%, then the AGF of the well event will default to 1.00. If a well event has acid gas content greater than 25% then the AGF has a minimum value of 0.78.

The AGF is determined based on the following formula:

$$AGF = [1.03 - (H_2S\% + CO_2\%)]$$

The ADP is adjusted by multiplying the ADP by the AGF, that is:

$$\text{Adjusted ADP} = ADP * AGF$$

The acid gas content of a well event, used by the department for the determination of the AGF, will be according to the records of the ERCB.

A depth factor (DF) is required for all well events, and is calculated based on the measured depth (MD) according to the records of the ERCB for that well event. Information on the MD, of a well event, can be found on the Petroleum Registry of Alberta (PRA) in the 'Infrastructure' section.

The DF is used in the determination of the quantity component (r_q) of the royalty rate; it adjusts the quantity component royalty formula for measured depths that exceed 2000 metres. The DF for a well event is determined based on the following formula:

$$DF = \left(\frac{MD}{2000} \right)^2$$

A well event with a MD greater than 2,000 metres will receive a royalty adjustment based on production from the well event. A well event without a reported MD or with MD less than or equal to 2,000 metres will have a DF of 1.00. The DF is capped at 4.00 for well events with MD greater than or equal to 4,000 metres.

If the MD is

- $\leq$ 2,000 metres, then the DF = 1.00
- > 2,000 metres and <4,000 metres, then $DF = \left(\frac{MD}{2000} \right)^2$
- $\geq$ 4,000 metres, then the DF = 4.00

AC2 - Custom Processing Adjustment Factor Allocations

ABGP0001021	ABGP0001335	ABGP0001692	ABGS0002704
ABGP0001024	ABGP0001340	ABGP0001693	ABGS0002745
ABGP0001034	ABGP0001343	ABGP0001695	ABGS0002751
ABGP0001036	ABGP0001345	ABGP0001696	ABGS0002800
ABGP0001037	ABGP0001350	ABGP0001697	ABGS0002823
ABGP0001047	ABGP0001351	ABGP0001698	ABGS0002848
ABGP0001057	ABGP0001355	ABGP0001713	ABGS0002880
ABGP0001058	ABGP0001357	ABGP0001714	ABGS0002889
ABGP0001067	ABGP0001360	ABGP0001720	ABGS0002988
ABGP0001069	ABGP0001364	ABGP0001730	ABGS0003030
ABGP0001070	ABGP0001374	ABGP0001740	ABGS0003040
ABGP0001079	ABGP0001379	ABGP0001746	ABGS0003045
ABGP0001082	ABGP0001380	ABGP0001748	ABGS0003214
ABGP0001084	ABGP0001383	ABGP0001761	ABGS0003268
ABGP0001088	ABGP0001391	ABGP0001766	ABGS0003280
ABGP0001096	ABGP0001392	ABGP0001774	ABGS0003319
ABGP0001101	ABGP0001402	ABGP0001775	ABGS0003333
ABGP0001103	ABGP0001404	ABGP0001789	ABGS0003543
ABGP0001107	ABGP0001417	ABGP0001791	ABGS0003592
ABGP0001108	ABGP0001427	ABGP0001792	ABGS0003642
ABGP0001110	ABGP0001429	ABGP0001853	ABGS0003651
ABGP0001112	ABGP0001468	ABGP0001854	ABGS0003686
ABGP0001121	ABGP0001472	ABGP0001858	ABGS0003739
ABGP0001125	ABGP0001482	ABGP0001862	ABGS0003787
ABGP0001129	ABGP0001486	ABGP0001863	ABGS0003849
ABGP0001130	ABGP0001497	ABGP0001868	ABGS0003969
ABGP0001131	ABGP0001506	ABGP0001874	ABGS0003990
ABGP0001133	ABGP0001511	ABGP0001875	ABGS0004088
ABGP0001134	ABGP0001520	ABGP0001878	ABGS0004165
ABGP0001135	ABGP0001522	ABGP0001880	ABGS0004168
ABGP0001139	ABGP0001524	ABGP0001886	ABGS0004225
ABGP0001141	ABGP0001527	ABGP0001892	ABGS0004226
ABGP0001144	ABGP0001532	ABGP0001895	ABGS0004249
ABGP0001147	ABGP0001537	ABGP0001960	ABGS0004263
ABGP0001149	ABGP0001548	ABGP0001962	ABGS0004274
ABGP0001153	ABGP0001549	ABGP0001976	ABGS0004321
ABGP0001156	ABGP0001550	ABGP0001984	ABGS0004364
ABGP0001159	ABGP0001560	ABGP0001985	ABGS0004385
ABGP0001163	ABGP0001561	ABGP0001987	ABGS0004412
ABGP0001166	ABGP0001562	ABGP0001997	ABGS0004432
ABGP0001169	ABGP0001566	ABGP0090927	ABGS0004497
ABGP0001172	ABGP0001577	ABGS0002207	ABGS0004510
ABGP0001184	ABGP0001609	ABGS0002282	ABGS0004538
ABGP0001202	ABGP0001612	ABGS0002323	ABGS0004568
ABGP0001217	ABGP0001617	ABGS0002369	ABGS0004585
ABGP0001222	ABGP0001624	ABGS0002382	ABGS0004587
ABGP0001224	ABGP0001625	ABGS0002392	ABGS0004649
ABGP0001227	ABGP0001629	ABGS0002396	ABGS0004850
ABGP0001233	ABGP0001630	ABGS0002419	ABGS0004854
ABGP0001267	ABGP0001634	ABGS0002437	ABGS0004860
ABGP0001268	ABGP0001645	ABGS0002438	ABGS0004863

AC2 - Custom Processing Adjustment Factor Allocations

ABGP0001270	ABGP0001646	ABGS0002443	ABGS0006052
ABGP0001279	ABGP0001661	ABGS0002491	ABGS0006055
ABGP0001292	ABGP0001664	ABGS0002516	ABGS0006057
ABGP0001296	ABGP0001666	ABGS0002517	ABGS0006074
ABGP0001309	ABGP0001667	ABGS0002570	ABGS0006097
ABGP0001311	ABGP0001668	ABGS0002652	ABGS0006370
ABGP0001316	ABGP0001669	ABGS0002653	ABGS0078357

CO2 Project Credit/EOR claim
ABIF0009870 (ABIS10008)

2005 Deep Gas Royalty Holiday Program

Well IDs		
100-16-03-073-12W600	100-07-27-059-04W6-00	100-11-01-047-12W5-00
100-05-34-055-21W5-00 & 02	100-14-22-055-20-W500	100-16-28-050-16W5-02
100-05-15-056-21W5-00 & 03	100-10-18-045-15W5-02	100-08-04-044-09W5-02
100-11-21-055-21W5-00 & 02	100-11-01-049-18W5-00	100-06-22-052-20W5-00
100-07-25-055-21W5-00 & 03	100-06-03-057-02W6-00	100-06-33-044-14W5-03
102-14-26-041-09W5-00		
100-07-20-052-17W5-02		
100-03-14-054-22W5-02		

ROYALTY OPERATIONS - EDMONTON

Interest Rates=ATB Financial Prime +1%

	2010	2009	2008	2007	2006	2005	2004
JAN 1	3.25	4.50	7.00	7.00	6.00	5.25	5.50
FEB 1	3.25	4.00	6.75	7.00	6.25	5.25	5.25
MAR 1		4.00	6.75	7.00	6.25	5.25	5.25
APR 1		3.50	6.25	7.00	6.50	5.25	5.00
MAY 1		3.25	5.75	7.00	6.75	5.25	4.75
JUN 1		3.25	5.75	7.00	7.00	5.25	4.75
JUL 1		3.25	5.75	7.00	7.00	5.25	4.75
AUG 1		3.25	5.75	7.25	7.00	5.25	4.75
SEP 1		3.25	5.75	7.25	7.00	5.25	4.75
OCT 1		3.25	5.75	7.25	7.00	5.50	5.00
NOV 1		3.25	5.00	7.25	7.00	5.75	5.25
DEC 1		3.25	5.00	7.25	7.00	5.75	5.25

PREPARED BY GAS ROYALTY CALCULATION